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To Dick Bauman <DBAUMAN@pn.usbr.gov>
cc cameron_ochiltree@urscorp.com, Michael
Lidgard/R10/USEPA/US@EPA
bcc

Subject Re: Fw: Elwha WTP Permit, Call for Meeting

Hi Dick,

Thanks for talking to Cameron. I'd cc'd him on the original message but I wasn't sure if he was still on the project.

Let me briefly explain the issue. I am concerned that the plant, as designed, may not be able to meet Washington's turbidity standard, which reads as follows:
WAC 173-201A-200

Turbidity shall not exceed:

- 5 NTU over background when the background is 50 NTU or less; or
- A 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

This sounds easy enough to meet, because Reclamation's 2004 document "Predicted Effects of Sediment Discharge from the Elwha Water Treatment Plant" shows that, under most conditions, the plant will not cause more than a 10% increase in sediment concentrations to the river (Table 3). However, that table also assumes that the discharge would be mixed with 100% of the upstream flow. This is not allowed under Washington's mixing zone rules. WAC 173-201A-400(7)(a)(ii) states that mixing zones must not utilize more than 25% of the stream flow. This would effectively limit the facility to approximately a 2.5% increase in turbidity to the (entire) river. Assuming there's a linear relationship between sediment concentrations and turbidity, this is equivalent to a 2.5% increase in sediment concentrations. Table 3 shows that the plant would cause more than a 2.5% increase in sediment concentrations, except under average demand conditions, with average or higher river flow (about 1500 CFS or greater).

I want to hear from you as to how difficult it will be to meet such a turbidity (or sediment) limit, and what the options are for moving forward.

Thank you,

Brian Nickel

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